

**BEFORE THE DEPARTMENT OF
NATURAL RESOURCES AND CONSERVATION
OF THE STATE OF MONTANA**

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APPLICATION FOR BENEFICIAL WATER USE PERMIT NO. 39E 30150494) BY DENBURY GREEN PIPELINE –) MONTANA, LLC)	PRELIMINARY DETERMINATION TO GRANT TEMPORARY PERMIT
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On December 8, 2020, Denbury Green Pipeline-Montana, LLC (Applicant) submitted Application for Beneficial Water Use Permit No. 39E 30150494 to the Billings Water Resources Office of the Department of Natural Resources and Conservation (Department or DNRC) for various flow rates throughout the proposed period of diversion up to 2,373 GPM flow rate and 19.68 AF of volume for industrial use (hydrostatic testing and dust abatement). The Department published receipt of the Application on its website. The Application was determined to be correct and complete as of May 7, 2021. Christine Schweigert, Jill Lippard and Mark Elison of the Department met with Rusty Shaw and Bill Atchinson of Denbury and Chad Barnes of SWCA (Consultant) on November 13, 2020. An Environmental Assessment by the Bureau of Land Management for this Project was adopted on April 14, 2021.

INFORMATION

The Department considered the following information submitted by the Applicant, which is contained in the administrative record.

Application as filed:

- Application for Beneficial Water Use Permit, Form 600
- Maps: undated aerial photo map overlain with roads, water sources and landownership showing proposed point of diversion and place of use.
- A photograph of the proposed point of diversion dated July 2018.
- Letter from SWCA, consultant, to Mark Elison, DNRC, dated November 18, 2020 requesting a variance from measuring requirements.

Information Received after Application Filed

- Approval of variance from measurement requirements dated January 19, 2021.
- Email exchanges between DNRC Hydrologist Christine Schweigert, Denbury Environmental Compliance Manager Rusty Shaw and SWCA Environmental Consultant Chad Barnes discussing the flow rate, volume, purpose and place of use dated November 13, 2020 through May 11, 2021.

Information within the Department's Possession/Knowledge

- Letter from Montana Sage Grouse Habitat Conservation Program to Rusty Shaw of Denbury Inc. dated September 26, 2018.
- Environmental Assessment by the Bureau of Land Management Miles City Office titled DOI-BLM-MT-C020-2017-0081-EA Denbury Green Pipeline-Montana, LLC; Denbury Onshore, LLC, dated August 2018
- DNRC water right records
- Water right files for previous temporary permit application nos. 39E 30119886 and 39E 30145887.
- DNRC Technical Report dated May 7, 2021
- USGS stream gaging information for gage no. 06334630 Box Elder Creek at Webster, MT.
- USGS Thornthwaite Water Balance Model
- Weather station information from Ekalaka, Montana station.

The Department has fully reviewed and considered the evidence and argument submitted in this Application and preliminarily determines the following pursuant to the Montana Water Use Act (Title 85, chapter 2, part 3, MCA). **NOTE:** Department or DNRC means the Department of Natural Resources & Conservation; CFS means cubic feet per second; GPM means gallons per minute; AF means acre-feet; AC means acres; AF/YR means acre-feet per year; and POD means point of diversion.

PROPOSED APPROPRIATION

FINDINGS OF FACT

1. The Applicant proposes to divert water from Buffalo Creek, by means of a pump, from July 15 to July 31 at 2,373 GPM, from August 1 to August 31 at 780 GPM, from September 1 to September 30 at 1,060 GPM and from October 1 to October 31 at 2,260 GPM up to 19.68 AF, from a point of diversion located in the NENWSW Sec. 10, T2S, R59E Carter County, for industrial use (hydrostatic testing and dust abatement) from July 15 through October 31, 2020. The place of use for hydrostatic testing over approximately 123 miles of pipeline includes portions of 132 Sections in Powder River, Carter and Fallon Counties. The place of use for dust abatement covers portions of 24 sections in Carter County. Tables 1 and 2, below, are lists of the places of use for hydrostatic testing and dust abatement:

Table 1. Places of use for hydrostatic testing

Township, Range, Section	Quarter Section	Township, Range, Section	Quarter Section	Township, Range, Section	Quarter Section
6 N 60 E 3	SW	1 N 60 E 31	E2SE	5 S 57 E 9	ALL
6 N 60 E 10	NWNW	1 S 60 E 4	ALL	5 S 57 E 8	SESE
6 N 60 E 9	ALL	1 S 60 E 5	S2	5 S 57 E 17	ALL
6 N 60 E 16	N2NW	1 S 60 E 8	W2	5 S 57 E 20	W2NW
6 N 60 E 17	ALL	1 S 60 E 7	E2SE	5 S 57 E 19	E2
6 N 60 E 20	NWNW	1 S 60 E 18	E2	5 S 57 E 30	ALL
6 N 60 E 19	ALL	1 S 60 E 19	ALL	5 S 56 E 25	E2
6 N 60 E 30	E2W2	1 S 59 E 24	SESE	5 S 56 E 36	ALL
6 N 60 E 31	W2	1 S 59 E 25	ALL	5 S 56 E 35	SESE
5 N 60 E 6	W2W2	1 S 59 E 26	SE	6 S 57 E 5	N2
5 N 60 E 7	W2W2	1 S 59 E 35	ALL	6 S 57 E 6	ALL
5 N 60 E 18	W2	1 S 59 E 34	SESE	6 S 57 E 7	W2
5 N 60 E 19	E2W2	2 S 59 E 2	W2	6 S 57 E 18	W2NW
5 N 60 E 30	E2W2	2 S 59 E 3	E2	6 S 56 E 13	E2
5 N 60 E 31	E2W2	2 S 59 E 10	ALL	6 S 56 E 24	ALL
4 N 60 E 3	W2E2	2 S 59 E 9	SESE	6 S 56 E 25	NW
4 N 60 E 10	W2E2	2 S 59 E 16	ALL	6 S 56 E 26	ALL
4 N 60 E 15	E2	2 S 59 E 21	N2NW	6 S 56 E 35	W2
4 N 60 E 23	W2W2	2 S 59 E 20	ALL	7 S 56 E 2	W2W2
4 N 60 E 22	E2NE	2 S 59 E 29	W2	7 S 56 E 3	E2

4 N 60 E 26	W2W2	2 S 59 E 30	S2	7 S 56 E 10	ALL
4 N 60 E 35	W2W2	2 S 58 E 36	E2	7 S 56 E 15	NWNW
3 N 60 E 2	W2W2	3 S 58 E 1	ALL	7 S 56 E 16	E2
3 N 60 E 11	W2W2	3 S 58 E 2	E2SE	7 S 56 E 21	ALL
3 N 60 E 14	NWNW	3 S 58 E 11	ALL	7 S 56 E 20	SE
3 N 60 E 15	E2E2	3 S 58 E 14	NWNW	7 S 56 E 29	N2
3 N 60 E 22	E2	3 S 58 E 15	E2	7 S 56 E 30	ALL
3 N 60 E 27	ALL	3 S 58 E 22	ALL	7 S 56 E 31	W2
3 N 60 E 34	E2W2	3 S 58 E 27	NWNW	8 S 56 E 6	W2W2
2 N 60 E 3	W2W2	3 S 58 E 28	ALL	8 S 56 E 7	W2W2
2 N 60 E 4	E2SE	3 S 58 E 33	NW	8 S 56 E 18	W2W2
2 N 60 E 10	W2W2	3 S 58 E 32	E2	8 S 56 E 19	W2W2
2 N 60 E 15	W2W2	4 S 58 E 5	ALL	8 S 56 E 30	NWNW
2 N 60 E 22	W2W2	4 S 58 E 6	E2SE	8 S 55 E 25	ALL
2 N 60 E 21	SESE	4 S 58 E 7	ALL	8 S 55 E 29	S2S2
2 N 60 E 28	E2	4 S 57 E 13	ALL	8 S 55 E 30	S2
2 N 60 E 33	ALL	4 S 58 E 18	NWNW	8 S 54 E 25	ALL
1 N 60 E 4	NW	4 S 57 E 24	W2	8 S 54 E 26	N2S2
1 N 60 E 5	E2	4 S 57 E 23	SE	8 S 54 E 27	S2
1 N 60 E 8	ALL	4 S 57 E 26	ALL	8 S 55 E 36	NW
1 N 60 E 17	E2W2	4 S 57 E 35	NWNW	8 S 55 E 35	S2N2
1 N 60 E 20	W2	4 S 57 E 34	ALL	8 S 55 E 34	S2N2
1 N 60 E 29	W2W2	5 S 57 E 3	NW	8 S 55 E 33	N2
1 N 60 E 32	W2W2	5 S 57 E 4	E2	8 S 55 E 32	NENE

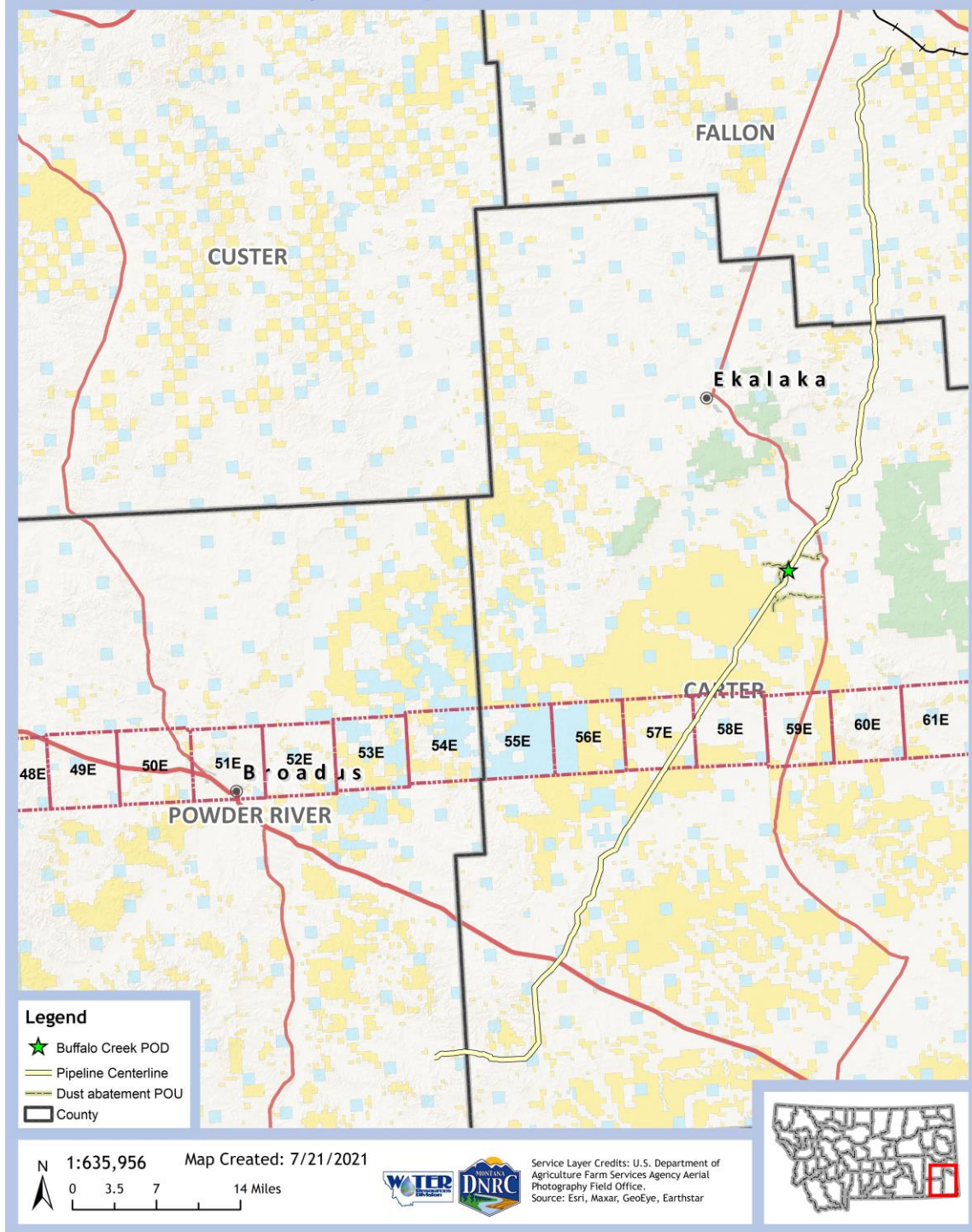
Table 2. Place of use for dust abatement

Township, Range, Section	Quarter Section/Government Lot
T1S R59E 24	SESE
T1S R59E 25	W2, NE
T1S R59E 26	SE
T1S R59E 34	SESE
T1S R59E 35	W2, N2NE
T1S R60E 18	S2S2, E2
T1S R60E 19	W2, NWNE
T2S R58E 36	E2
T2S R59E 1	S2, LOTS 15 & 16
T2S R59E 10	W2, NWNE
T2S R59E 16	ALL

T2S R59E 2	ALL
T2S R59E 20	S2, E2NE
T2S R59E 21	S2S2, N2NW
T2S R59E 22	S2
T2S R59E 23	S2
T2S R59E 24	S2S2
T2S R59E 29	ALL
T2S R59E 3	E2, S2SW
T2S R59E 30	LOTS 3 & 4
T2S R59E 5	S2S2
T2S R59E 8	N2NE
T2S R59E 9	ALL
T3S R58E 1	N2, NWSW

2. The proposed use is temporary ending on December 31, 2024
3. The place of use is generally located in Powder River, Carter and Fallon Counties.

NA 39E 30150494 Denbury Green Pipeline - Montana, LLC



Preliminary Determination to Grant
Application for Beneficial Water Use Permit No. 39E 30150494.

§ 85-2-311, MCA, BENEFICIAL WATER USE PERMIT CRITERIA

GENERAL CONCLUSIONS OF LAW

4. The Montana Constitution expressly recognizes in relevant part that:
- (1) All existing rights to the use of any waters for any useful or beneficial purpose are hereby recognized and confirmed.
 - (2) The use of all water that is now or may hereafter be appropriated for sale, rent, distribution, or other beneficial use . . . shall be held to be a public use.
 - (3) All surface, underground, flood, and atmospheric waters within the boundaries of the state are the property of the state for the use of its people and are subject to appropriation for beneficial uses as provided by law.

Mont. Const. Art. IX, §3. While the Montana Constitution recognizes the need to protect senior appropriators, it also recognizes a policy to promote the development and use of the waters of the state by the public. This policy is further expressly recognized in the water policy adopted by the Legislature codified at § 85-2-102, MCA, which states in relevant part:

- (1) Pursuant to Article IX of the Montana constitution, the legislature declares that any use of water is a public use and that the waters within the state are the property of the state for the use of its people and are subject to appropriation for beneficial uses as provided in this chapter. . . .
- (3) It is the policy of this state and a purpose of this chapter to encourage the wise use of the state's water resources by making them available for appropriation consistent with this chapter and to provide for the wise utilization, development, and conservation of the waters of the state for the maximum benefit of its people with the least possible degradation of the natural aquatic ecosystems. In pursuit of this policy, the state encourages the development of facilities that store and conserve waters for beneficial use, for the maximization of the use of those waters in Montana . . .

5. Pursuant to § 85-2-302(1), MCA, except as provided in §§ 85-2-306 and 85-2-369, MCA, a person may not appropriate water or commence construction of diversion, impoundment, withdrawal, or related distribution works except by applying for and receiving a permit from the Department. See § 85-2-102(1), MCA. An applicant in a beneficial water use permit proceeding must affirmatively prove all of the applicable criteria in § 85-2-311, MCA. Section § 85-2-311(1) states in relevant part:

... the department shall issue a permit if the applicant proves by a preponderance of evidence that the following criteria are met:

(a) (i) there is water physically available at the proposed point of diversion in the amount that the applicant seeks to appropriate; and

(ii) water can reasonably be considered legally available during the period in which the applicant seeks to appropriate, in the amount requested, based on the records of the department and other evidence provided to the department. Legal availability is determined using an analysis involving the following factors:

(A) identification of physical water availability;

(B) identification of existing legal demands on the source of supply throughout the area of potential impact by the proposed use; and

(C) analysis of the evidence on physical water availability and the existing legal demands, including but not limited to a comparison of the physical water supply at the proposed point of diversion with the existing legal demands on the supply of water.

(b) the water rights of a prior appropriator under an existing water right, a certificate, a permit, or a state water reservation will not be adversely affected. In this subsection (1)(b), adverse effect must be determined based on a consideration of an applicant's plan for the exercise of the permit that demonstrates that the applicant's use of the water will be controlled so the water right of a prior appropriator will be satisfied;

(c) the proposed means of diversion, construction, and operation of the appropriation works are adequate;

(d) the proposed use of water is a beneficial use;

(e) the applicant has a possessory interest or the written consent of the person with the possessory interest in the property where the water is to be put to beneficial use, or if the proposed use has a point of diversion, conveyance, or place of use on national forest system lands, the applicant has any written special use authorization required by federal law to occupy, use, or traverse national forest system lands for the purpose of diversion, impoundment, storage, transportation, withdrawal, use, or distribution of water under the permit;

(f) the water quality of a prior appropriator will not be adversely affected;

(g) the proposed use will be substantially in accordance with the classification of water set for the source of supply pursuant to 75-5-301(1); and

(h) the ability of a discharge permit holder to satisfy effluent limitations of a permit issued in accordance with Title 75, chapter 5, part 4, will not be adversely affected.

(2) The applicant is required to prove that the criteria in subsections (1)(f) through (1)(h) have been met only if a valid objection is filed. A valid objection must contain substantial credible information establishing to the satisfaction of the department that the criteria in subsection (1)(f), (1)(g), or (1)(h), as applicable, may not be met. For the criteria set forth in subsection (1)(g), only the department of environmental quality or a local water quality district established under Title 7, chapter 13, part 45, may file a valid objection.

To meet the preponderance of evidence standard, “the applicant, in addition to other evidence demonstrating that the criteria of subsection (1) have been met, shall submit hydrologic or other evidence, including but not limited to water supply data, field reports, and other information developed by the applicant, the department, the U.S. geological survey, or the U.S. natural resources conservation service and other specific field studies.” § 85-2-311(5), MCA (emphasis added). The determination of whether an application has satisfied the § 85-2-311, MCA criteria is committed to the discretion of the Department. Bostwick Properties, Inc. v. Montana Dept. of Natural Resources and Conservation, 2009 MT 181, ¶ 21. The Department is required grant a permit only if the § 85-2-311, MCA, criteria are proven by the applicant by a preponderance of the evidence. Id. A preponderance of evidence is “more probably than not.” Hohenlohe v. DNRC, 2010 MT 203, ¶¶33, 35.

6. Pursuant to § 85-2-312, MCA, the Department may condition permits as it deems necessary to meet the statutory criteria:

(1) (a) The department may issue a permit for less than the amount of water requested, but may not issue a permit for more water than is requested or than can be beneficially used without waste for the purpose stated in the application. The department may require modification of plans and specifications for the appropriation or related diversion or construction. The department may issue a permit subject to terms, conditions, restrictions, and limitations it considers necessary to satisfy the criteria listed in 85-2-311 and subject to subsection (1)(b), and it may issue temporary or seasonal permits. A permit must be issued subject to existing rights and any final determination of those rights made under this chapter.

E.g., Montana Power Co. v. Carey (1984), 211 Mont. 91, 96, 685 P.2d 336, 339 (requirement to grant applications as applied for, would result in, “uncontrolled development of a valuable natural resource” which “contradicts the spirit and purpose underlying the Water Use Act.”); see also, In the Matter of Application for Beneficial Water Use Permit No. 65779-76M by Barbara L. Sowers (DNRC Final Order 1988)(conditions in stipulations may be included if it further compliance with statutory criteria); In the Matter of Application for Beneficial Water Use Permit No. 42M-80600 and Application for Change of Appropriation Water Right No. 42M-036242 by Donald H. Wyrick (DNRC Final Order 1994); Admin. R. Mont. (ARM) 36.12.207.

7. The Montana Supreme Court further recognized in Matter of Beneficial Water Use Permit Numbers 66459-76L, Ciotti: 64988-G76L, Starnes (1996), 278 Mont. 50, 60-61, 923 P.2d 1073, 1079, 1080, *superseded by legislation on another issue*:

Nothing in that section [85-2-313], however, relieves an applicant of his burden to meet the statutory requirements of § 85-2-311, MCA, before DNRC may issue that provisional permit. Instead of resolving doubts in favor of appropriation, the Montana Water Use Act requires an applicant to make explicit statutory showings that there are unappropriated waters in the source of supply, that the water rights of a prior appropriator will not be adversely affected, and that the proposed use will not unreasonably interfere with a planned use for which water has been reserved.

See also, Wesmont Developers v. DNRC, CDV-2009-823, First Judicial District Court,

Memorandum and Order (2011). The Supreme Court likewise explained that:

.... unambiguous language of the legislature promotes the understanding that the Water Use Act was designed to protect senior water rights holders from encroachment by junior appropriators adversely affecting those senior rights.

Montana Power Co., 211 Mont. at 97-98, 685 P.2d at 340; see also Mont. Const. art. IX §3(1).

8. An appropriation, diversion, impoundment, use, restraint, or attempted appropriation, diversion, impoundment, use, or restraint contrary to the provisions of § 85-2-311, MCA is invalid. An officer, agent, agency, or employee of the state may not knowingly permit, aid, or assist in any manner an unauthorized appropriation, diversion, impoundment, use, or other restraint. A person or corporation may not, directly or indirectly, personally or through an agent, officer, or employee, attempt to appropriate, divert, impound, use, or otherwise restrain or control waters within the boundaries of this state except in accordance with this § 85-2-311, MCA. § 85-2-311(6), MCA.

9. The Department may take notice of judicially cognizable facts and generally recognized technical or scientific facts within the Department's specialized knowledge, as specifically identified in this document. ARM 36.12.221(4).

Physical Availability
FINDINGS OF FACT

10. Buffalo Creek is a non-perennial stream according to USGS and is documented as having no flow in July and August 2018 by the Applicant. While the photos document that there was zero flow on some days in the months the photos were taken, it does not mean that there is never flow during those months and that is why some flow is shown in the modeling exercise below. Buffalo Creek is a tributary to Boxelder Creek which had a USGS gage from 1960 to 1973. The gage shows that flow in any given month can vary from zero or near zero to over 1,000 CFS. Flow in July and August varied from 0.665 CFS to 122.3 CFS. A copy of the gage record is in the file under the Processing Information and Correspondence flag. The Applicant requested and received a variance from the water measurement requirements in ARM 36.12.1702(3). The variance allowed the Applicant to not take measurements every month throughout the requested period of diversion. DNRC used the USGS Thornthwaite Water Balance model, StreamStats of Montana online application and the USGS gaging station records for USGS 06334630 Box Elder Creek at Webster, MT to estimate monthly and annual flow rate and volume for the proposed point of diversion. The Department chose to use the modeled information over the single observations because the modeled information took into consideration over 13 years of gage data and over 110 years of climate data from the same region. If there are low flows, the Applicant would be unable to divert (FOF 25-26).

11. Mean monthly temperature and precipitation were obtained from the Ekalaka, Montana weather station. The latitude was set to 46 degrees north and the elevation was 1,043.4 meters above mean sea level. The Thornthwaite model takes the input parameters and returns total annual runoff which is then multiplied by the basin area in acres to determine annual runoff in AF/YR. The drainage basin above the Buffalo Creek POD is approximately 91.7 Sq. miles based on mapping in the USGS StreamStats Montana program. Annual runoff above the proposed POD is estimated at 7,971.4 AF. The total volume was divided by 1.98 and by 365 to estimate the mean annual flow rate at 11.03 CFS.

12. The Dept. took the mean monthly flow at the Boxelder Creek gage and divided it by the mean annual volume to determine the percent of mean for each month. DNRC then multiplied the predicted mean annual flow on Buffalo Creek by the monthly percent of mean annual for

Boxelder Creek to estimate the monthly flow rate on Buffalo Creek. The flow rate was multiplied by the number of days each month and by 1.98 to calculate the monthly volume at the proposed point of diversion.

Table 3. Predicted monthly flow rate and volume at proposed POD on Buffalo Creek

Month	Mean Monthly Flow at Boxelder Creek Gage (CFS)	Percent of Mean Annual at Boxelder Creek gage (monthly mean divided by mean annual ^(90.55 CFS))	Predicted flow on Buffalo Creek (CFS) ^(11.03 CFS*mo. %)	Predicted flow on Buffalo Creek (GPM) ^(CFS*448.8)	Predicted Volume on Buffalo Creek (AF) ^(CFS*1.98*no. days)	No. Days/Mo.
January	4.2	4.64%	0.51	229.69	31.41	31
February	63	69.57%	7.67	3,443.90	425.42	28
March	249	274.98%	30.33	13,612.24	1,861.67	31
April	215	237.43%	26.19	11,753.41	1,555.60	30
May	222	245.16%	27.04	12,136.07	1,659.79	31
June	199	219.76%	24.24	10,878.70	1,439.83	30
July	44	48.59%	5.36	2,405.33	328.96	31
August	15	16.57%	1.83	820.26	112.18	31
September	20	22.09%	2.44	1,093.51	144.73	30
October	42	46.38%	5.12	2,295.93	314.00	31
November	9.9	10.93%	1.21	541.06	71.61	30
December	5.3	5.85%	0.65	289.59	39.61	31

13. The Thornthwaite model is an accepted method for determining annual runoff from non-perennial streams in eastern MT. The distribution of flow based on percent of mean at a similar gaged source is an accepted method for estimating monthly distribution of flow. Buffalo Creek is within the Boxelder Creek drainage basin and has similar basin characteristics. The Boxelder Creek gage is the only gage in the basin.

CONCLUSIONS OF LAW

14. Pursuant to § 85-2-311(1)(a)(i), MCA, an applicant must prove by a preponderance of the evidence that “there is water physically available at the proposed point of diversion in the amount that the applicant seeks to appropriate.”

15. It is the applicant's burden to produce the required evidence. *In the Matter of Application for Beneficial Water Use Permit No. 27665-411 by Anson* (DNRC Final Order 1987)(applicant produced no flow measurements or any other information to show the availability of water; permit denied); *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, (DNRC Final Order 2005).

16. An applicant must prove that at least in some years there is water physically available at the point of diversion in the amount the applicant seeks to appropriate. *In the Matter of Application for Beneficial Water Use Permit No. 72662s76G by John Fee and Don Carlson* (DNRC Final Order 1990); *In the Matter of Application for Beneficial Water Use Permit No. 85184s76F by Wills Cattle Co. and Ed McLean* (DNRC Final Order 1994).

17. The Applicant has proven that water is physically available at the proposed point of diversion in the amount Applicant seeks to appropriate. § 85-2-311(1)(a)(i), MCA. (FOF 10-13)

Legal Availability:

FINDINGS OF FACT

18. The area of potential impact for this application is approximately 2.8 miles downstream to the mouth of Buffalo Creek at Boxelder Creek. This area includes the entire length of Buffalo Creek below the POD. There is a reservoir between the proposed POD and the mouth of the stream that controls flow below it. Variables considered in the selection of this area of potential impact include the non-perennial nature of the source, possible connectivity issues and the recognition that it is sometimes dry and not a viable contributor to Boxelder Creek.

19. There are four legal demands within the area of potential impact. The legal demands are for livestock drinking directly from the source with no flow rate or volume assigned. The Department assigns a flow rate of 35 GPM (0.07 CFS) to the first right and all others are taken as zero. The volume is calculated as the number of animal units claimed times the Department standard of 0.017 AF per year which is equal to 15 gallons per day per animal unit.

Table 4. Legal Demands on Buffalo Creek within the area of potential impact

Water Right Number	Owner(s)	Flow Rate (CFS)	Volume per Month (AF)
39E 37697-00	Wolff Ranch Inc.	0.07	0.72
39E 37699-00	Wolff Ranch Inc.	0.00	0.72

39E 37705-00	Wolff Ranch Inc. & O'Connor Ranch Lands LLC	0.00	0.72
39E 38460-00	Wolff Ranch Inc.	0.00	0.72
		0.07	2.88

20. Below is a comparison of the physical water supply at the point of diversion to the existing legal demands in the area of potential impact over the proposed period of diversion by flow rate and volume.

Table 5. Comparison of physical and legal demands by flow rate (CFS)

	Jul	Aug	Sep	Oct
Predicted Flow	5.36	1.83	2.44	5.12
Legal Demands	0.07	0.07	0.07	0.07
Predicted Minus Legal Demands	5.29	1.76	2.37	5.05

Table 6. Comparison of physical and legal demands by volume (AF)

	Jul	Aug	Sep	Oct
Predicted Volume	328.96	112.18	144.73	314.0
Legal Demands	2.88	2.88	2.88	2.88
Predicted Minus Legal Demands	326.08	109.30	141.85	311.12

21. The amount of water predicted minus legal demands exceeds the requested flow rate and volume throughout the proposed period of diversion.

CONCLUSIONS OF LAW

22. Pursuant to § 85-2-311(1)(a), MCA, an applicant must prove by a preponderance of the evidence that:

(ii) water can reasonably be considered legally available during the period in which the applicant seeks to appropriate, in the amount requested, based on the records of the department and other evidence provided to the department. Legal availability is determined using an analysis involving the following factors:

- (A) identification of physical water availability;
- (B) identification of existing legal demands on the source of supply throughout the area of potential impact by the proposed use; and
- (C) analysis of the evidence on physical water availability and the existing legal demands, including but not limited to a comparison of the physical water supply at the proposed point of diversion with the existing legal demands on the supply of water.

E.g., ARM 36.12.101 and 36.12.120; Montana Power Co., 211 Mont. 91, 685 P.2d 336 (Permit granted to include only early irrigation season because no water legally available in late irrigation season); *In the Matter of Application for Beneficial Water Use Permit No. 81705-g76F by Hanson* (DNRC Final Order 1992).

23. It is the applicant's burden to present evidence to prove water can be reasonably considered legally available. Sitz Ranch v. DNRC, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 7 (the legislature set out the criteria (§ 85-2-311, MCA) and placed the burden of proof squarely on the applicant. The Supreme Court has instructed that those burdens are exacting.); see also Matter of Application for Change of Appropriation Water Rights Nos. 101960-41S and 101967-41S by Royston (1991), 249 Mont. 425, 816 P.2d 1054 (burden of proof on applicant in a change proceeding to prove required criteria); *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, (DNRC Final Order 2005) (it is the applicant's burden to produce the required evidence.); *In the Matter of Application for Beneficial Water Use Permit No. 41H 30023457 by Utility Solutions, LLC* (DNRC Final Order 2007)(permit denied for failure to prove legal availability); see also ARM 36.12.1705.

24. Applicant has proven by a preponderance of the evidence that water can reasonably be considered legally available during the period in which the applicant seeks to appropriate, in the amount requested, based on the records of the Department and other evidence provided to the Department. § 85-2-311(1)(a)(ii), MCA. (FOF 18-21)

Adverse Effect

FINDINGS OF FACT

25. The Applicants are using pumps which can be shut down any time call is made. The Applicant proposes to monitor all water withdrawals and uses during the project activities to ensure compliance with permits, additionally, the Applicant has land access agreements in place with landowners in the project area that allow the landowners to stop Denbury from withdrawing water if low water levels start impacting existing uses.

26. The Applicant proposes to find alternate sources of water such as temporary leases or purchase of municipal water if water supply is insufficient to meet existing legal demands.

27. The predicted amount of water physically and legally available at the proposed point of diversion exceeds the amount requested in this application for all months in the proposed period of diversion.

CONCLUSIONS OF LAW

28. Pursuant to § 85-2-311(1)(b), MCA, the Applicant bears the affirmative burden of proving by a preponderance of the evidence that the water rights of a prior appropriator under an existing water right, a certificate, a permit, or a state water reservation will not be adversely affected. Analysis of adverse effect must be determined based on a consideration of an applicant's plan for the exercise of the permit that demonstrates that the applicant's use of the water will be controlled so the water right of a prior appropriator will be satisfied. See Montana Power Co. (1984), 211 Mont. 91, 685 P.2d 336 (purpose of the Water Use Act is to protect senior appropriators from encroachment by junior users); Bostwick Properties, Inc. ¶ 21.

29. An applicant must analyze the full area of potential impact under the § 85-2-311, MCA criteria. *In the Matter of Beneficial Water Use Permit No. 76N-30010429 by Thompson River Lumber Company* (DNRC Final Order 2006). While § 85-2-361, MCA, limits the boundaries expressly required for compliance with the hydrogeologic assessment requirement, an applicant is required to analyze the full area of potential impact for adverse effect in addition to the requirement of a hydrogeologic assessment. Id. ARM 36.12.120(5).

30. Applicant must prove that no prior appropriator will be adversely affected, not just the objectors. Sitz Ranch v. DNRC, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 4.

31. In analyzing adverse effect to other appropriators, an applicant may use the water rights claims of potentially affected appropriators as evidence of their “historic beneficial use.” See Matter of Application for Change of Appropriation Water Rights Nos. 101960-41S and 101967-41S by Royston (1991), 249 Mont. 425, 816 P.2d 1054.

32. It is the applicant's burden to produce the required evidence. E.g., Sitz Ranch v. DNRC, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 7 (legislature has placed the burden of proof squarely on the applicant); *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, (DNRC Final Order 2005). (DNRC Final Order 2005). The Department is required to grant a permit only if the § 85-2-311, MCA, criteria are proven by the applicant by a preponderance of the evidence. Bostwick Properties, Inc. ¶ 21.

33. Section 85-2-311 (1)(b) of the Water Use Act does not contemplate a de minimis level of adverse effect on prior appropriators. Wesmont Developers v. DNRC, CDV-2009-823, First Judicial District Court, *Memorandum and Order*, (2011) Pg. 8.

34. Adverse effect not required to be measurable but must be calculable. Sitz Ranch v. DNRC, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 7 (DNRC permit denial affirmed; 3 gpm and 9 gpm depletion to surface water not addressed in legal availability or mitigation plan.); Wesmont Developers v. DNRC, CDV-2009-823, First Judicial District Court, *Memorandum and Order*, (2011) Pg. 12 ("DNRC properly determined that Wesmont cannot be authorized to divert, either directly or indirectly, 205.09 acre-feet from the Bitterroot River without establishing that the water does not belong to a senior appropriator"; applicant failed to analyze legal availability of surface water where projected depletion from groundwater pumping); *In the Matter of Beneficial Water Use Permit No. 76N-30010429 by Thompson River Lumber Company* (DNRC Final Order 2006); see also Robert and Marlene Tackle v. DNRC et al., Cause No. DV-92-323, Montana Fourth Judicial District for Ravalli County, *Opinion and Order* (June 23, 1994). Artesian pressure is not protectable and a reduction by a junior appropriator is not considered an adverse effect. See In re Application No. 72948-G76L by Cross, (DNRC Final Order 1991); see also In re Application No. 75997-G76L by Carr, (DNRC Final Order 1991).

35. The Applicant has proven by a preponderance of the evidence that the water rights of a prior appropriator under an existing water right, a certificate, a permit, or a state water reservation will not be adversely affected. § 85-2-311(1)(b), MCA. (FOF 25-27)

Adequate Diversion

FINDINGS OF FACT

36. Water for hydrostatic testing and dust abatement will be diverted from Buffalo Creek by construction contractors using water pumps with variable pumping rates. The variable pumping rate will allow the Applicant to use the amount of water that is permitted based upon availability in the source. Water will be conveyed to the pipeline via water hose at a rate of 1 mile per hour or limited to the flow rate available in the source and limited to the amount allowed by the permit at the time the test is performed. Denbury can cascade the water through pipeline sections if needed to reduce the total amount of water diverted from the source. The Applicant will be responsible to ensure that they meet all DEQ requirements for discharge.

37. Water for dust abatement will be diverted using contracted water tanker trucks. Typically, a 15 HP centrifugal pump is use with a flow range up to 530 GPM. All water diversions will be measured, and contractors will be required to maintain water gauges on each pump. Water logs will be maintained to document specific water quantities withdrawn at the POD.

CONCLUSIONS OF LAW

38. Pursuant to § 85-2-311(1)(c), MCA, an Applicant must demonstrate that the proposed means of diversion, construction, and operation of the appropriation works are adequate.

39. The adequate means of diversion statutory test merely codifies and encapsulates the case law notion of appropriation to the effect that the means of diversion must be reasonably effective, i.e., must not result in a waste of the resource. *In the Matter of Application for Beneficial Water Use Permit No. 33983s41Q by Hoyt* (DNRC Final Order 1981); § 85-2-312(1)(a), MCA.

40. Whether party presently has easement not relevant to determination of adequate means of diversion. *In the Matter of Application to Change a Water Right No. G129039-76D by Keim/Krueger* (DNRC Final Order 1989).

41. Applicant has proven by a preponderance of the evidence that the proposed means of diversion, construction, and operation of the appropriation works are adequate for the proposed beneficial use. § 85-2-311(1)(c), MCA (FOF 36-37).

Beneficial Use

FINDINGS OF FACT

42. The Applicant proposes to use the water for industrial purposes (hydrostatic testing and dust abatement) which are beneficial uses under the Montana Water Use Act.

43. The requested flow rate for industrial use is 2,373 GPM July 15 to July 31, 780 GPM August 1 to August 31, 1,060 GPM September 1 to September 30 and 2,260 GPM October 1 to October 31 which is the amount of water physically and legally available in the source during the period requested. Denbury's flow request is for the maximum amount available because the other sources they had hoped to use have been eliminated because of timing in core Sage-Grouse habitat.

44. The requested volume of 19.68 AF includes 13.54 AF for hydrostatic testing and 6.14 AF for dust abatement. The 13.54 AF is a portion of what is required to pressurize the entire 123-mile pipeline and will be cascaded through the pipeline to test it in sections. The Applicant provided a pipeline schematic showing the volume requirements for each section of 16-inch and 12-inch pipeline. Denbury will only use the amount absolutely needed and may cascade water through the pipeline rather than fill it entirely if water availability is limited. The 6.14 AF for dust abatement is based on 200,000 gallons per day for up to 10 days ($200,000 * 10/325,851 = 6.14$). The water will be spread approximately 10 miles north and south of the point of diversion.

CONCLUSIONS OF LAW

45. Under § 85-2-311(1)(d), MCA, an Applicant must prove by a preponderance of the evidence the proposed use is a beneficial use.

46. An appropriator may appropriate water only for a beneficial use. See also, § 85-2-301 MCA. It is a fundamental premise of Montana water law that beneficial use is the basis, measure, and limit of the use. E.g., McDonald, supra; Toohey v. Campbell (1900), 24 Mont. 13, 60 P. 396. The amount of water under a water right is limited to the amount of water necessary to sustain the beneficial use. E.g., Bitterroot River Protective Association v. Siebel, Order on Petition for Judicial Review, Cause No. BDV-2002-519, Montana First Judicial District Court,

Lewis and Clark County (2003), *affirmed on other grounds*, 2005 MT 60, 326 Mont. 241, 108 P.3d 518; *In The Matter Of Application For Beneficial Water Use Permit No. 43C 30007297 by Dee Deaterly* (DNRC Final Order), *affirmed other grounds*, Dee Deaterly v. DNRC et al, Cause No. 2007-186, Montana First Judicial District, *Order Nunc Pro Tunc on Petition for Judicial Review* (2009); Worden v. Alexander (1939), 108 Mont. 208, 90 P.2d 160; Allen v. Petrick (1924), 69 Mont. 373, 222 P. 451; *In the Matter of Application for Beneficial Water Use Permit No. 41S-105823 by French* (DNRC Final Order 2000).

Amount of water to be diverted must be shown precisely. Sitz Ranch v. DNRC, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 3 (citing BRPA v. Siebel, 2005 MT 60, and rejecting applicant's argument that it be allowed to appropriate 800 acre-feet when a typical year would require 200-300 acre-feet).

47. It is the applicant's burden to produce the required evidence. Sitz Ranch v. DNRC, DV-10-13390, Fifth Judicial District Court, *Order Affirming DNRC Decision*, (2011) Pg. 7; *In the Matter of Application to Change Water Right No. 41H 1223599 by MGRR #1, LLC.*, (DNRC Final Order 2005); see also Royston; Ciotti.

48. Applicant proposes to use water for industrial (hydrostatic testing and dust abatement) which is a recognized beneficial use. § 85-2-102(5), MCA. Applicant has proven by a preponderance of the evidence industrial is a beneficial use and that 2,373 GPM July 15 to July 31, 780 GPM August 1 to August 31, 1,060 GPM September 1 to September 30 and 2,260 GPM October 1 to October 31 and 19.68 AF of diverted volume of water requested is the amount needed to sustain the beneficial use. § 85-2-311(1)(d), MCA, (FOF 42-44)

Possessory Interest

FINDINGS OF FACT

49. The Applicant signed the affidavit on the application form affirming the Applicant has the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use. This appropriation is specifically for hydrostatic testing and dust abatement along the pipeline. No water can be used in the absence of right-of-way agreements which constitute written consent.

CONCLUSIONS OF LAW

50. Pursuant to § 85-2-311(1)(e), MCA, an Applicant must prove by a preponderance of the evidence that it has a possessory interest or the written consent of the person with the possessory interest in the property where the water is to be put to beneficial use, or if the proposed use has a point of diversion, conveyance, or place of use on national forest system lands, the applicant has any written special use authorization required by federal law to occupy, use, or traverse national forest system lands for the purpose of diversion, impoundment, storage, transportation, withdrawal, use, or distribution of water under the permit.

51. Pursuant to ARM 36.12.1802:

(1) An applicant or a representative shall sign the application affidavit to affirm the following:

(a) the statements on the application and all information submitted with the application are true and correct and

(b) except in cases of an instream flow application, or where the application is for sale, rental, distribution, or is a municipal use, or in any other context in which water is being supplied to another and it is clear that the ultimate user will not accept the supply without consenting to the use of water on the user's place of use, the applicant has possessory interest in the property where the water is to be put to beneficial use or has the written consent of the person having the possessory interest.

(2) If a representative of the applicant signs the application form affidavit, the representative shall state the relationship of the representative to the applicant on the form, such as president of the corporation, and provide documentation that establishes the authority of the representative to sign the application, such as a copy of a power of attorney.

(3) The department may require a copy of the written consent of the person having the possessory interest.

52. The Applicant has proven by a preponderance of the evidence that it has a possessory interest, or the written consent of the person with the possessory interest, in the property where the water is to be put to beneficial use. § 85-2-311(1)(e), MCA. (FOF 49)

PRELIMINARY DETERMINATION

Subject to the terms, analysis, and conditions in this Order, the Department preliminarily determines that this Application for Temporary Beneficial Water Use Permit No. 39E 30150494 should be GRANTED and will expire on December 31, 2024.

The Department determines the Applicant may divert water from Buffalo Creek, by means of a pump, from July 15 through July 31 at 2,373 GPM, from August 1 to August 31 at 780 GPM, from September 1 to September 30 at 1,060 GPM and from October 1 to October 31 at 2,260 GPM up to 19.68 AF, from a point in the NENWSW Sec. 10, T2S, R59E Carter County, for industrial use (hydrostatic testing and dust abatement) from July 15 through October 31. The place of use is:

Table 7. Place of use for hydrostatic testing

Township, Range, Section	Quarter Section	Township, Range, Section	Quarter Section	Township, Range, Section	Quarter Section
6 N 60 E 3	SW	1 N 60 E 31	E2SE	5 S 57 E 9	ALL
6 N 60 E 10	NWNW	1 S 60 E 4	ALL	5 S 57 E 8	SESE
6 N 60 E 9	ALL	1 S 60 E 5	S2	5 S 57 E 17	ALL
6 N 60 E 16	N2NW	1 S 60 E 8	W2	5 S 57 E 20	W2NW
6 N 60 E 17	ALL	1 S 60 E 7	E2SE	5 S 57 E 19	E2
6 N 60 E 20	NWNW	1 S 60 E 18	E2	5 S 57 E 30	ALL
6 N 60 E 19	ALL	1 S 60 E 19	ALL	5 S 56 E 25	E2
6 N 60 E 30	E2W2	1 S 59 E 24	SESE	5 S 56 E 36	ALL
6 N 60 E 31	W2	1 S 59 E 25	ALL	5 S 56 E 35	SESE
5 N 60 E 6	W2W2	1 S 59 E 26	SE	6 S 57 E 5	N2
5 N 60 E 7	W2W2	1 S 59 E 35	ALL	6 S 57 E 6	ALL
5 N 60 E 18	W2	1 S 59 E 34	SESE	6 S 57 E 7	W2
5 N 60 E 19	E2W2	2 S 59 E 2	W2	6 S 57 E 18	W2NW
5 N 60 E 30	E2W2	2 S 59 E 3	E2	6 S 56 E 13	E2
5 N 60 E 31	E2W2	2 S 59 E 10	ALL	6 S 56 E 24	ALL
4 N 60 E 3	W2E2	2 S 59 E 9	SESE	6 S 56 E 25	NW
4 N 60 E 10	W2E2	2 S 59 E 16	ALL	6 S 56 E 26	ALL
4 N 60 E 15	E2	2 S 59 E 21	N2NW	6 S 56 E 35	W2
4 N 60 E 23	W2W2	2 S 59 E 20	ALL	7 S 56 E 2	W2W2
4 N 60 E 22	E2NE	2 S 59 E 29	W2	7 S 56 E 3	E2

4 N 60 E 26	W2W2	2 S 59 E 30	S2	7 S 56 E 10	ALL
4 N 60 E 35	W2W2	2 S 58 E 36	E2	7 S 56 E 15	NWNW
3 N 60 E 2	W2W2	3 S 58 E 1	ALL	7 S 56 E 16	E2
3 N 60 E 11	W2W2	3 S 58 E 2	E2SE	7 S 56 E 21	ALL
3 N 60 E 14	NWNW	3 S 58 E 11	ALL	7 S 56 E 20	SE
3 N 60 E 15	E2E2	3 S 58 E 14	NWNW	7 S 56 E 29	N2
3 N 60 E 22	E2	3 S 58 E 15	E2	7 S 56 E 30	ALL
3 N 60 E 27	ALL	3 S 58 E 22	ALL	7 S 56 E 31	W2
3 N 60 E 34	E2W2	3 S 58 E 27	NWNW	8 S 56 E 6	W2W2
2 N 60 E 3	W2W2	3 S 58 E 28	ALL	8 S 56 E 7	W2W2
2 N 60 E 4	E2SE	3 S 58 E 33	NW	8 S 56 E 18	W2W2
2 N 60 E 10	W2W2	3 S 58 E 32	E2	8 S 56 E 19	W2W2
2 N 60 E 15	W2W2	4 S 58 E 5	ALL	8 S 56 E 30	NWNW
2 N 60 E 22	W2W2	4 S 58 E 6	E2SE	8 S 55 E 25	ALL
2 N 60 E 21	SESE	4 S 58 E 7	ALL	8 S 55 E 29	S2S2
2 N 60 E 28	E2	4 S 57 E 13	ALL	8 S 55 E 30	S2
2 N 60 E 33	ALL	4 S 58 E 18	NWNW	8 S 54 E 25	ALL
1 N 60 E 4	NW	4 S 57 E 24	W2	8 S 54 E 26	N2S2
1 N 60 E 5	E2	4 S 57 E 23	SE	8 S 54 E 27	S2
1 N 60 E 8	ALL	4 S 57 E 26	ALL	8 S 55 E 36	NW
1 N 60 E 17	E2W2	4 S 57 E 35	NWNW	8 S 55 E 35	S2N2
1 N 60 E 20	W2	4 S 57 E 34	ALL	8 S 55 E 34	S2N2
1 N 60 E 29	W2W2	5 S 57 E 3	NW	8 S 55 E 33	N2
1 N 60 E 32	W2W2	5 S 57 E 4	E2	8 S 55 E 32	NENE

Table 8. Place of use for dust abatement

Township, Range, Section	Quarter Section/Government Lot
T1S R59E 24	SESE
T1S R59E 25	W2, NE
T1S R59E 26	SE
T1S R59E 34	SESE
T1S R59E 35	W2, N2NE
T1S R60E 18	S2S2, E2
T1S R60E 19	W2, NWNE
T2S R58E 36	E2
T2S R59E 1	S2, LOTS 15 & 16
T2S R59E 10	W2, NWNE

T2S R59E 16	ALL
T2S R59E 2	ALL
T2S R59E 20	S2, E2NE
T2S R59E 21	S2S2, N2NW
T2S R59E 22	S2
T2S R59E 23	S2
T2S R59E 24	S2S2
T2S R59E 29	ALL
T2S R59E 3	E2, S2SW
T2S R59E 30	LOTS 3 & 4
T2S R59E 5	S2S2
T2S R59E 8	N2NE
T2S R59E 9	ALL
T3S R58E 1	N2, NWSW

NOTICE

This Department will provide public notice of this Application and the Department's Preliminary Determination to Grant pursuant to §§ 85-2-307, MCA. The Department will set a deadline for objections to this Application pursuant to §§ 85-2-307, and -308, MCA. If this Application receives no valid objection or all valid objections are unconditionally withdrawn, the Department will grant this Application as herein approved. If this Application receives a valid objection, the application and objection will proceed to a contested case proceeding pursuant to Title 2 Chapter 4 Part 6, MCA, and § 85-2-309, MCA. If valid objections to an application are received and withdrawn with stipulated conditions and the department preliminarily determined to grant the permit or change in appropriation right, the department will grant the permit or change subject to conditions necessary to satisfy applicable criteria.

DATED this 8th day of September 2021.

/Original signed by Mark Elison/

Mark Elison, Manager

Billings Regional Office

Department of Natural Resources and Conservation

CERTIFICATE OF SERVICE

This certifies that a true and correct copy of the PRELIMINARY DETERMINATION TO GRANT was served upon all parties listed below on this ____ day of ____ 2021, by first class United States mail.

DENBURY GREEN PIPELINE-MONTANA

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BILLINGS REGIONAL OFFICE

DATE